

AI-TECH-31E

PATENT APPLICATION
Serial No. 10/784,704

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An antenna arrangement for detecting a wireless article comprising:
 - a first antenna loop disposed in a first plane for transmitting and/or receiving electromagnetic signals;
 - a first tunable circuit connected to said first antenna loop for coupling at least received signals therefrom;
 - a second antenna loop disposed at least in part in the first plane and overlapping at least in part said first antenna loop therein,
 - wherein said first and second antenna loops overlap at least in part in the first plane and define a detection region adjacent thereto in which said first and second antenna loops transmit and/or receive electromagnetic signals ~~with a component of an associated electromagnetic field in each of three mutually orthogonal directions~~ and in which a wireless article may be;
 - a second tunable circuit connected to said second antenna loop for coupling at least received signals therefrom; and
 - a processor coupled to said first and second tunable circuits for processing at least received signals from said first and second antenna loops for detecting a wireless article in the detection region.
2. (Original) The antenna arrangement of claim 1 wherein at least part of said second antenna loop is in a second plane and the angle at which the first and second intersecting planes intersect is between about 80° and about 100°.
3. (Original) The antenna arrangement of claim 1 wherein said first and second tunable circuits each includes at least one of a tuning circuit and a filter for selectively connecting said first and second antenna loops and said processor.